

SEQUENCE LISTING

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Ojaimi, Joseline

<120> METHODS FOR XENOTOPIC EXPRESSION OF NUCLEUS-ENCODED
PLANT AND PROTIST PEPTIDES AND USES THEREOF

<130> 5199/23

<160> 7

<170> PatentIn version 3.1

<210> 1

<211> 340

<212> PRT

<213> Chlamydomonas reinhardtii

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Ala Pro Val Ala Leu Gly Gln Ser Gly Ile Leu Thr Gly Ser Ser Gly
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Phe Lys Asn Gln Gly Phe Asn Gly Ser Leu Gln Ser Val Glu Asn His
35 40 45

Val Tyr Ala Gln Ala Phe Ser Thr Ser Ser Gln Glu Glu Gln Ala Ala
50 55 60

Pro Ser Ile Gln Gly Ala Ser Gly Met Lys Leu Pro Gly Met Ala Gly
65 70 75 80

Ser Met Leu Leu Gly Lys Ser Arg Ser Gly Leu Arg Thr Gly Ser Met
85 90 95

Val Pro Phe Ala Ala Gln Gln Ala Met Asn Met Ser Thr Ala Ala Gln
100 105 110

Val Gln Ser Gly Ala Thr Val Asn Ser Leu Leu Leu Gly Ile Tyr Arg
115 120 125

Phe Trp Arg Ser Gln Ala Pro Met Asp Lys Pro His Ala Pro Val Asp
130 135 140

Asp Arg Met Leu Pro Ala Ile Val Asp Ala Ser Asp Asn Arg Ala Ala
145 150 155 160

Leu Gly Thr Trp Ala Thr Ala Leu Phe Cys Thr Ile Leu Ala Ser Asn
165 170 175

Leu Leu Gly Leu Val Pro Thr Asn Glu Ala Pro Thr Ser Gly Leu Gly
180 185 190

Phe Ala Thr Gly Leu Gly Val Ser Val Trp Ala Thr Ala Thr Thr Leu
195 200 205

Gly Leu Tyr Lys Leu Gly Phe Ser Phe Pro Gly His Phe Ile Pro Gly
210 215 220

Gly Thr Pro Trp Pro Met Ala Phe Ile Phe Val Pro Leu Glu Thr Ile
225 230 235 240

Ser Tyr Thr Phe Arg Ala Val Ser Leu Gly Val Arg Leu Trp Val Asn
245 250 255

Met Leu Ala Gly His Thr Leu Leu His Ile Leu Thr Gly Met Ala Leu
260 265 270

Ala Leu Pro Phe Ser Leu Ser Phe Phe Ala Met Val Pro Ala Thr Phe
275 280 285

Ala Val Ala Cys Leu Leu Ser Ala Leu Val Gly Leu Glu Tyr Leu Val
290 295 300

Ala Val Leu Gln Ser Gly Val Phe Ser Ile Leu Ser Thr Val Tyr Val
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Gly Glu Phe Asn Ser Val Lys Leu Ala Gly Pro Leu Ala Lys Val Val
325 330 335

Lys Lys Ala Leu
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<210> 2

<211> 249

<212> PRT

<213> Prototheca wickerhamii

<400> 2

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Leu His Ile Gly Asn Tyr Tyr Phe Ser Phe Thr Asn Ser Ser Leu Tyr
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Ile Phe Leu Ala Ile Gly Thr Ala Gly Leu Leu Phe His Phe Val Thr
35 40 45

Gln Asn Gly Gly Phe Leu Val Pro Ser Arg Trp Gln Ser Leu Val Glu
50 55 60

Met Ile Tyr Glu Phe Val Arg Ser Leu Ile Gln Glu Gln Ile Gly Ala
65 70 75 80

Lys Gly Arg Lys Tyr Phe Pro Leu Val Phe Thr Leu Phe Val Phe Leu
85 90 95

Leu Phe Thr Asn Leu Ile Gly Met Ile Pro Tyr Ser Phe Thr Ala Thr
100 105 110

Ser His Leu Ala Val Thr Phe Gly Leu Ser Leu Ser Leu Phe Ile Ala
115 120 125

Ile Thr Ile Ile Gly Phe Gln Val His Gly Leu His Phe Phe Ser Phe
130 135 140

Leu Leu Pro Lys Gly Ala Pro Leu Ile Leu Ala Pro Leu Leu Val Val
145 150 155 160

Leu Glu Leu Val Ser Tyr Ser Phe Arg Ala Ile Ser Leu Gly Val Arg
165 170 175

Leu Phe Ala Asn Met Met Ala Gly His Thr Leu Val Lys Ile Leu Ser
180 185 190

Gly Phe Ala Trp Thr Met Leu Ser Val Gly Gly Ile Leu Ser Val Ala
195 200 205

Ser Ile Leu Pro Phe Ala Val Val Phe Ala Leu Ile Gly Leu Glu Ile
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Gly Val Ala Cys Leu Gln Ala Tyr Val Phe Thr Ile Leu Val Cys Ile
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Tyr Leu Asn Asp Ala Ile Asn Leu His
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<211> 259

<212> PRT

<213> *Saccharomyces cerevisiae*

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Glu Ile Arg Thr Leu Phe Gly Leu Gln Ser Ser Phe Ile Asp Leu Ser
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Cys Leu Asn Leu Thr Thr Phe Ser Leu Tyr Thr Ile Ile Val Leu Leu
35 40 45

Val Ile Thr Ser Leu Tyr Thr Leu Thr Asn Asn Asn Asn Lys Ile Ile
50 55 60

Gly Ser Arg Trp Leu Ile Ser Gln Glu Ala Ile Tyr Asp Thr Ile Met
65 70 75 80

Asn Met Thr Lys Gly Gln Ile Gly Gly Lys Asn Trp Gly Leu Tyr Phe
85 90 95

Pro Met Ile Phe Thr Leu Phe Met Phe Ile Phe Ile Ala Asn Leu Ile
100 105 110

Ser Met Ile Pro Tyr Ser Phe Ala Leu Ser Ala His Leu Val Phe Ile
115 120 125

Ile Ser Leu Ser Ile Val Ile Trp Leu Gly Asn Thr Ile Leu Gly Leu
130 135 140

Tyr Lys His Gly Trp Val Phe Phe Ser Leu Phe Val Pro Ala Gly Thr
145 150 155 160

Pro Leu Pro Leu Val Pro Leu Leu Val Ile Ile Glu Thr Leu Ser Tyr
165 170 175

Phe Ala Arg Ala Ile Ser Leu Gly Leu Arg Leu Gly Ser Asn Ile Leu
180 185 190

Ala Gly His Leu Leu Met Val Ile Leu Ala Gly Leu Thr Phe Asn Phe
195 200 205

Met Leu Ile Asn Leu Phe Thr Leu Val Phe Gly Phe Val Pro Leu Ala
210 215 220

Met Ile Leu Ala Ile Met Met Leu Glu Phe Ala Ile Gly Ile Ile Gln
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Gly Tyr Val Trp Ala Ile Leu Thr Ala Ser Tyr Leu Lys Asp Ala Val
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Tyr Leu His

<210> 4

<211> 226

<212> PRT

<213> Homo sapiens

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Thr Ser Lys Tyr Leu Ile Asn Asn Arg Leu Ile Thr Thr Gln Gln Trp
35 40 45

Leu Ile Lys Leu Thr Ser Lys Gln Met Met Thr Met His Asn Thr Lys
50 55 60

Gly Arg Thr Trp Ser Leu Met Leu Val Ser Leu Ile Ile Phe Ile Ala
65 70 75 80

Thr Thr Asn Leu Leu Gly Leu Leu Pro His Ser Phe Thr Pro Thr Thr
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Gln Leu Ser Met Asn Leu Ala Met Ala Ile Pro Leu Trp Ala Gly Thr
100 105 110

Val Ile Met Gly Phe Arg Ser Lys Ile Lys Asn Ala Leu Ala His Phe

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<210> 5

<211> 8

<212> PRT

<213> Artificial sequence

<220>

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<223> FLAG epitope tag

<400> 5

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<210> 6

<211> 2222

<212> DNA

<213> Chlamydomonas reinhardtii

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<212> DNA

<213> Chlamydomonas reinhardtii

<400> 7

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